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      4 May 12
                  Polymer links for the POLYLINK command completed in REGISTRY
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                 New UPM (Update Code Maximum) field for more efficient
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                  SDIs in CAplus
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      6 May 27
                  CAplus super roles and document types searchable in REGISTRY
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      7 Jun 28
                 Additional enzyme-catalyzed reactions added to CASREACT
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      8 Jun 28
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                  and WATER from CSA now available on STN(R)
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                 BEILSTEIN enhanced with new display and select options,
                  resulting in a closer connection to BABS
NEWS 10 Jul 30
                 BEILSTEIN on STN workshop to be held August 24 in
conjunction
                 with the 228th ACS National Meeting
NEWS 11 AUG 02
                 IFIPAT/IFIUDB/IFICDB reloaded with new search and display
                 fields
NEWS 12 AUG 02 CAplus and CA patent records enhanced with European and
Japan
                 Patent Office Classifications
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         AUG 02
                 STN User Update to be held August 22 in conjunction with the
                 228th ACS National Meeting
         AUG 02
                 The Analysis Edition of STN Express with Discover!
                  (Version 7.01 for Windows) now available
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                 Pricing for the Save Answers for SciFinder Wizard within
                 STN Express with Discover! will change September 1, 2004
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              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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STRUCTURE FILE UPDATES: 3 AUG 2004 HIGHEST RN 721883-12-1 DICTIONARY FILE UPDATES: 3 AUG 2004 HIGHEST RN 721883-12-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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SAMPLE SEARCH INITIATED 14:48:24 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 171 TO ITERATE

100.0% PROCESSED 171 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 2636 TO PROJECTED ANSWERS:

0 TO

L2

0 SEA SSS SAM L1

9 SEA SSS FUL L1

=> s ll sss full

FULL SEARCH INITIATED 14:48:33 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 3577 TO ITERATE

100.0% PROCESSED 3577 ITERATIONS SEARCH TIME: 00.00.01

9 ANSWERS

=> d 13 1-9

ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 291298-90-3 REGISTRY

Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H19 C1 O5

SR CA

CA, CAPLUS LCSTN Files:

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 179798-13-1 REGISTRY

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-CN biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.alpha.,4.beta.)-

FS STEREOSEARCH

MF C21 H19 C1 O5

SR CA

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

Roles from patents: BIOL (Biological study); PREP (Preparation); USES RL.P (Uses)

#### Page 4

Relative stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
- RN 179798-12-0 REGISTRY
- CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)
  OTHER CA INDEX NAMES:
- CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.beta.,4.beta.)-
- FS STEREOSEARCH
- MF C21 H19 Cl O5
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
- DT.CA CAplus document type: Patent
- RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

Relative stereochemistry.

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L3
     ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN
     179798-11-9 REGISTRY
CN
     Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-
     biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-
CN
     biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.alpha.,4.alpha.)-
FS
     STEREOSEARCH
MF
     C21 H19 Cl O5
SR
     CA
     STN Files:
                  CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
      Roles from patents: BIOL (Biological study); PREP (Preparation); USES
RL.P
       (Uses)
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Relative stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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2 REFERENCES IN FILE CA (1907 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L3
     ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
     179548-98-2 REGISTRY
RN
     Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     [(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
     (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     [(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
     (1.alpha., 2.beta., 4.beta.) -
FS
     STEREOSEARCH
MF
     C30 H24 C1 N O5
SR
     CA
LC
     STN Files:
                  CA, CAPLUS, TOXCENTER, USPATFULL
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Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Relative stereochemistry.

DT.CA CAplus document type: Patent

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
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L3
     ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN
     179548-97-1 REGISTRY
CN
     Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     (hydroxymethyl)-, 2-propenyl ester, (1R,2R,4S)-rel- (9CI) (CA INDEX
NAME)
OTHER CA INDEX NAMES:
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     (hydroxymethyl)-, 2-propenyl ester, (1.alpha., 2.beta., 4.beta.)-
FS
     STEREOSEARCH
MF
    C22 H21 C1 O4
SR
                 CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
      Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.P
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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
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2 REFERENCES IN FILE CA (1907 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
L3
RN
     179547-41-2 REGISTRY
     Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     [(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     [(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-,
     (1.alpha.,2.beta.,4.beta.)-
FS
     STEREOSEARCH
MF
    C27 H20 C1 N O5
SR
     CA
     STN Files:
                  CA, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Patent
      Roles from patents: BIOL (Biological study); PREP (Preparation); USES
RL.P
       (Uses)
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## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 179547-40-1 REGISTRY

CN Cyclobutanecarboxylic acid,

2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-

(hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclobutanecarboxylic acid,

2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-

(hydroxymethyl)-, (1.alpha.,2.beta.,4.beta.)-

FS STEREOSEARCH

MF C19 H17 Cl O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

#### Relative stereochemistry.

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 179547-39-8 REGISTRY

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1.alpha.,2.beta.,4.alpha.)-

FS STEREOSEARCH

MF C21 H19 Cl O5

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Relative stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 172.19 172.40

FULL ESTIMATED COST

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4

4 L3

=> d ibib abs hitstr 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:849718 CAPLUS

DOCUMENT NUMBER:

136:160844

TITLE:

3D-quantitative structure activity relationships of biphenyl carboxylic acid MMP-3 inhibitors: exploring

automated docking as alignment method

AUTHOR(S):

Muegge, Ingo; Podlogar, Brent L.

CORPORATE SOURCE: SOURCE:

Bayer Research Center, West Haven, CT, 06516, USA Quantitative Structure-Activity Relationships (2001),

20(3), 215-222

CODEN: QSARDI; ISSN: 0931-8771

PUBLISHER:

Wiley-VCH Verlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB A series of CoMFA models have been derived from docking-based and atom-based alignments. The statistics of these approaches has been compared to det. whether a docking approach can be employed as an automated alignment tool for the development of 3D-QSAR models. Using a well-characterized training set of 51 biphenyl carboxylic acid MMP-3 inhibitors, the docking-based alignment provided by a DOCK4/PMF-scoring protocol has yielded statistically significant, cross-validated CoMFA models comparable to those derived with a traditional atom-based

alignment

technique. Field fit minimization has been applied to refine the atom-based and docking-based alignments. The refinement appears to be beneficial for the docking-based approach. For the atom-based alignment, however, field-fit refinement has not resulted in improved CoMFA models. The statistically best CoMFA model has been created by the atom-based alignment that has been found, however, to be inconsistent with the stromelysin crystal structure. The docking alignment refined by

field-fit

alignment has resulted in a final alignment that is consistent with the crystal structure and only slightly statistically inferior to the atom-based aligned CoMFA model. The results show the ability of an automated docking/field-fit alignment technique to provide

self-consistent

CoMFA alignments.

IT 291298-90-3

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(3D-QSAR of biphenyl carboxylic acid MMP-3 inhibitors exploring automated docking as an alignment method)

291298-90-3 CAPLUS RN

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

20

THERE ARE 20 CITED REFERENCES AVAILABLE FOR

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RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:439095 CAPLUS

DOCUMENT NUMBER:

133:219279

TITLE:

Evaluation of docking/scoring approaches: a comparative study based on MMP3 inhibitors Ha, Sookhee; Andreani, Romana; Robbins, Arthur;

AUTHOR(S):

Muegge, Ingo

CORPORATE SOURCE:

SOURCE:

Bayer Research Center, West Haven, CT, 06516, USA Journal of Computer-Aided Molecular Design (2000),

14(5), 435-448

CODEN: JCADEQ; ISSN: 0920-654X

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal

LANGUAGE:

English

An increasing no. of docking/scoring programs are available that use AB different sampling and scoring algorithms. A reliable scoring function is

to

the crucial element of such approaches. Comparative studies are needed

evaluate their current capabilities. DOCK4 with force field and PMF scoring as well as FlexX were used to evaluate the predictive power of these docking/scoring approaches to identify the correct binding mode of 61 MMP-3 inhibitors in a crystal structure of stromelysin and also to

rank

them according to their different binding affinities. It was found that DOCK4/PMF scoring performs significantly better than FlexX and DOCK4/FF

in

both ranking ligands and predicting their binding modes. Most notably, DOCK4/PMF was the only scoring/docking approach that found a significant correlation between binding affinity and predicted score of the docked inhibitors. However, comparing only those cases where the correct

binding

mode was identified (scoring highest among sampled poses), FlexX showed the best fine tuning (lowest rmsd) in predicted binding modes. The results suggest that not so much the sampling procedure but rather the scoring function is the crucial element of a docking program.

291298-90-3 TT

RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); BIOL (Biological study);
PROC (Process)

(inhibitor; comparative evaluation of docking/scoring approaches based on MMP3 inhibitors)

RN 291298-90-3 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

47

THERE ARE 47 CITED REFERENCES AVAILABLE FOR

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FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:534889 CAPLUS

DOCUMENT NUMBER:

129:161412

TITLE:

Derivatives of substituted 4-biarylbutyric acid as

matrix metalloprotease inhibitors

INVENTOR(S):

Kluender, Harold Clinton Eugene; Benz, Guenter Hans

Heinz Herbert; Brittelli, David Ross; Bullock,

William

Harrison; Combs, Kerry Jeanne; Dixon, Brian Richard; Schneider, Stephan; Wood, Jill Elizabeth; Vanzandt, Michael Christopher; Wolanin, Donald John; Wilhelm,

Scott M.

PATENT ASSIGNEE(S):

Bayer Corporation, USA

SOURCE:

U.S., 109 pp., Cont.-in-part of U.S. Ser. No.

339,846.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:
FAMILY ACC. NUM. COUNT:

English

PAMILI ACC. NOM. COL

PATENT INFORMATION:

PATENT NO. KI		DATE	APPLICATION NO.	DATE		
US 5789434 CA 2201863 CN 1163604	A AA A	19980804 19960523 19971029	US 1995-539409 CA 1995-2201863 CN 1995-196209	19951106 19951109 19951109		
CN 1121376 HU 78083	B A2	20030917	HU 1998-233			
PT 790974 ES 2181803	T	20021129	PT 1995-940572	19951109 19951109		
ZA 9509647	T3 A	20030301 19970814	ES 1995-940572 ZA 1995-9647	19951109 19951114		
TW 413675 US 5874473	B A	20001201 19990223	TW 1995-84112045 US 1997-864666	19951114 19970528		
US 5886024	Α	19990323	US 1997-865325	19970528		

US 5854277 US 5859047 US 5861427 US 5861428 US 5886043 US 6166082 PRIORITY APPLN. INFO.:	A A A A A	19981229 19990112 19990119 19990119 19990323 20001226	US US US US	1997-866680 1997-866778	<b>A</b> 2	19970530 19970530 19970530 19970530 19970530 19980409 19941115
			US	1995-462729	В1	19950605
			US	1995-463490	В1	19950605
			US	1995-463580	В1	19950605
			US	1995-463794	В1	19950605
			US	1995-464253	В1	19950605
			US	1995-465626	В1	19950605
			US	1995-539409	А	19951106

OTHER SOURCE(S):

MARPAT 129:161412

CO<sub>2</sub>H

Ph 0 0

AB Matrix metalloprotease (MMP) inhibitors TxA-B-D-E-G [I; T = halo, haloalkyl, alkynyl, (un)substituted alkyl or alkenyl; x = 0, 1, 2; A, B = arom. or heteroarom. ring; D = CO, CH(OH), CH2, C:NOH, C(S); E = substituted carbon chain; G = PO3H2, CO2H, CO2NH2, 5-tetrazolyl, etc.]

Ι

their pharmaceutically acceptable salts were prepd. In particular, I [A

C6H4; B = 1,4-C6H4; E = certain substituted THF, tetrahydrothiophene, or pyrrolidine divalent radicals] with MMP inhibitory activity, and their pharmaceutically acceptable salts, are claimed. For instance, claimed title compd. II was prepd. from L-pyroglutaminol in 9 steps. The synthesized compds. (444) were assayed for inhibition of MMP-3, MMP-9,

MMP-2. For instance, II had corresponding IC50 values of 103, 381, and

nM. I inhibited tumor growth and metastasis in animal models, and inhibited cartilage lesions in a guinea pig model of osteoarthritis.

IT 179548-97-1P 179548-98-2P

and

35

Relative stereochemistry.

RN 179548-98-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
(1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

#### IT 179547-40-1P 179798-12-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

RN 179547-40-1 CAPLUS

CN Cyclobutanecarboxylic acid,

2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-(hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 179798-12-0 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)

# IT 179547-39-8P 179547-41-2P 179798-11-9P 179798-13-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

RN 179547-39-8 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 179547-41-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI)
(CA INDEX NAME)

RN 179798-11-9 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 179798-13-1 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN ACCESSION NUMBER: 1996:476807 CAPLUS

DOCUMENT NUMBER:

125:142275

TITLE: acids

Substituted 4-biarylbutyric or 5-biarylpentanoic

INVENTOR(S):

and derivatives as matrix metalloprotease inhibitors Kluender, Harold Clinton Eugene; Benz, Guenter Hans Heinz Herbert; Brittelli, David Ross; Bullock,

William

Harrison; Combs, Kerry Jeanne; Dixon, Brian Richard; Schneider, Stephan; Wood, Jill Elizabeth; Vanzandt,

Michael Christopher; et al.

PATENT ASSIGNEE(S):

SOURCE:

Bayer A.-G., USA

PCT Int. Appl., 263 pp.

CODEN: PIXXD2

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Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

						KIND DATE			APPLICATION NO.					DATE					
	WO	9615				A1		1996	0523	WO 1995-US14002						19951109			
		W:	AM,	AT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CI	Η,	CN.	CZ.	DE.	DK.	E.E.	ES	FT
			GB,	GE,	HU,	IS,	JP,	KE,	KG,	KP.	KI	R.	KZ.	LK.	LR.	T.T	T.TT	T.V	MD
			MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	P.	Γ,	RO,	RU,	SD,	SE,	SG,	SI,	SK,
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		18354	-			В1		20020						2028			19	9511	.09
		22223				E		20020						4057			19	9511	.09
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		97020				A A		.9970					95-9					9511	
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PRIORITY APPLN. INFO.:
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                                             US 1995-465626
                                                                 B1 19950605
                                             WO 1995-US14002
                                                                 W 19951109
 OTHER SOURCE(S):
                         MARPAT 125:142275
     Matrix metalloprotease inhibitors TxA-B-D-E-G [Tx = substituent such as
     halo, C1-C10 alkyl, or cyanoalkenyl; x = 0, 1, 2; A, B = arom. or
     heteroarom. ring; D = CO, CH(OH), CH2, C:NOH, C(S); E = substituted
carbon
     chain; G = PO3H2, CO2H, CO2NH2, etc.] and their pharmaceutically
     acceptable salts were prepd. Thus,
 (S) - .gamma. - oxo-4' - (pentyloxy) - .alpha. -
     (3-phenylpropyl)-[1,1'-biphenyl]-4-butanoic acid (86) was prepd. via
     alkylation of di-Et (3-phenylpropyl)malonate with 2,4'-
     dibromoacetophenone, followed by sapon.-monodecarboxylation, reaction
with
     4-methoxybenzeneboronic acid, Me ether cleavage, and O-pentylation. The
     synthesized compds. (444) were assayed for inhibition of MMP-3, MMP-9,
and
     MMP-2. Using compds. such as 86, the no. of tumor metastases was
     decreased between 38 and 49% as compared to the control. The title
     compds. were also assayed for inhibition of cartilage lesions in a guinea
     pig model of osteoarthritis.
     179547-40-1P 179798-12-0P
     RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (prepn. of substituted biarylbutyric or biarylpentanoic acids and
        derivs. as matrix metalloprotease inhibitors)
RN
     179547-40-1 CAPLUS
     Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
     (hydroxymethyl)-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
Relative stereochemistry.
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RN 179798-12-0 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

# IT 179547-39-8P 179547-41-2P 179798-11-9P 179798-13-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted biarylbutyric or biarylpentanoic acids and derivs. as matrix metalloprotease inhibitors)

RN 179547-39-8 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2S,4S)-rel- (9CI) (CA INDEX NAME)

RN 179547-41-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, (1R,2R,4S)-rel- (9CI)
(CA INDEX NAME)

Relative stereochemistry.

RN 179798-11-9 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 179798-13-1 CAPLUS

CN Cyclobutanecarboxylic acid, 2-[(acetyloxy)methyl]-4-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-, (1R,2R,4R)-rel- (9CI) (CA INDEX NAME)

#### 

Relative stereochemistry.

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RN 179548-98-2 CAPLUS
CN Cyclobutanecarboxylic acid,
2-[(4'-chloro[1,1'-biphenyl]-4-yl)carbonyl]-4-
[(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl]-, 2-propenyl ester,
(1R,2R,4S)-rel- (9CI) (CA INDEX NAME)
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FILE 'REGISTRY' ENTERED AT 14:48:01 ON 04 AUG 2004

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 9 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:49:31 ON 04 AUG 2004 4 S L3

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L4

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \* Structure attributes must be viewed using STN Express query preparation.

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS FULL ESTIMATED COST	SINCE FILE ENTRY 22.75	TOTAL SESSION 195.15
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL
CA SUBSCRIBER PRICE	-2.94	SESSION -2.94

STN INTERNATIONAL LOGOFF AT 14:53:15 ON 04 AUG 2004